

Rec'd PCT/PTO 06 APR 2005

PCT/AU03/01321



REC'D 27 OCT 2003

WIPO PCT

Patent Office
Canberra

I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2002951987 for a patent by ELITE SHOOTING SUPPLIES PTY. LTD. as filed on 09 October 2002.

I further certify that the above application is now proceeding in the name of LOKAWAY PTY. LTD. pursuant to the provisions of Section 113 of the Patents Act 1990.



WITNESS my hand this
Twenty-second day of October 2003

JULIE BILLINGSLEY
TEAM LEADER EXAMINATION
SUPPORT AND SALES

**PRIORITY
DOCUMENT**
SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH RULE 17.1(a) OR (b)

Best Available Copy

ELITE SHOOTING SUPPLIES PTY. LTD.

A U S T R A L I A
Patents Act 1990

PROVISIONAL SPECIFICATION
for the invention entitled:

"SECURITY DOOR AND FRAME CONSTRUCTION"

The invention is described in the following statement:

TITLE: SECURITY DOOR AND FRAME CONSTRUCTION

FIELD OF THE INVENTION

5 This invention concerns security door and frame construction and relates to safes.

BACKGROUND OF THE INVENTION

Provision for security in doors include measures such as making the door and frame resistant to attack, providing special locks and adding multiple bolts which shoot into the frame. Such measures are effective in their own way and intruders devise counter measures as new security equipment becomes available.

SUMMARY OF THE INVENTION

10 This invention provides a security door construction comprising a door and door frame when a door is mounted on an offset hinge and the upright of the frame opposite the hinge has a slot capable of receiving the closing edge of the door, which upon closing slides into the slot and upon opening slides out of the slot.

15 The slot need only be shallow in that the admission of the margin of the closing edge of the door requires a large force to separate the door from the frame.

The slot may be a 5-12mm metal door such as is used for a safe. The timber door slot may be somewhat greater. The hinge access is not coincident with the longitudinal edge of the door as in a conventional door, the hinges offset from the door surface. The throw of the hinge may be 15-25mm to give the required sliding entry and exit.

The hinges may be paired conventionally but connected to the door face. The hinges may be connected to the door by a mounting member which provides the offset. The

mounting member may be a radius arm. The radius arm may be a second hinge fixed to the first hinge side by side.

The top and bottom hinges may be protected by a hinge box fixed to the face of the door.

5

The door may have a conventional lock with a bolt and a keeper in the door frame. Multiple sliding pin locks may be fitted, but these are not necessary due to the extensive door margin engagement of the slot.

- 10 Door and frame construction of this type is applicable to small box safes of the type used to store narcotics, cash and firearms. One application is now described pertaining to gun safes.

15 The uprights of the frame may be box-section styles. The door slot may be in the closing style. The body of the safe may be made of a single plate panel which is formed into a channel shape, including the box-section styles braced by a top plate and a bottom plate.

20 The hinge mounts may be mounted on the floor and the roof of the safe and extended to the safe interior. Each hinge may be part of a flange welded to the floor and roof. The hinges may be joined in order to preserve that axis of rotation of the door which would otherwise sag randomly on the radius arms.

The door may be a metal plate connected by a radius arm to the door hinges. Hinge mounts are located adjacent the door support style and the gap between the door and style

is closed up when the door is locked.

The hinges and the radius arms are preferably protected by a box extending the full length of the door. The door may be stiffened by a box brace fixed to the interior face of the door. A conventional lock may shoot a bolt into the door closing style.

BRIEF DESCRIPTION OF THE DRAWINGS

One embodiment is now described by way of example with reference to the accompanying drawings, in which:-

Figure 1 is a general arrangement of a gun safe with the hinge box removed for clarity.

Figure 2 is a section on A-A of Figure 1 with the door closed.

Figure 3 is the same section as Figure 2 with the door open.

DETAILED DESCRIPTION WITH RESPECT TO THE DRAWINGS

Referring now to the drawings, the gun safe body 2 is made of 2mm steel plate which is rolled into a channel section with the edges turned to form further channelled section styles 4, 6. The safe is closed by a top plate 8 and a bottom plate 10 welded to the body. The styles are therefore resistant to being forced apart by a jacking force applied between them.

The closing style 4 has three sides. The fourth side is formed by an L-section steel closer 12 welded to the body and projecting beyond the closing style. The 4mm gap 14 between the closer and the style extends the full length of the 3mm steel plate door 16.

- 5 Flanges 18, 20 are inset and welded to the floor and the roof. These are formed as door hinges 22, 24. The door carries extra hinges 26, 28 and these are welded to hinges 22, 24 so that they act as radius arms causing the door to throw as it opens. The throw is only 20mm, but is sufficient to allow the door edge to slide into the gap 14 by about half this distance.

10

The door is braced by channel 30 and is locked by lock 32 which shoots into closer 12. Extra hinges 26, 28 are connected by a rod 32 to ensure a common tilting axis parallel to the tilt axis of the floor and roof hinges 22, 24.

- 15 An ammunition box 34 is located at one side creating a pocket 36 for the accommodation of a shot gun.

We have found the advantages of the above embodiment to be:-

- 20 1. The usual sites for the prying bar are absent in the construction.
2. No multiple entry bolts are necessary.

The claims, illustrations, photographs and drawings, if any, form part of the disclosure

of this specification as does the description, claims, illustrations, photographs and drawings of any associated provisional or parent specification or of any priority document, if any, all of which are imported hereinto as part of the record hereof.

- 5 Finally it is to be understood that various alterations, modifications and/or additions may be incorporated into the various constructions and arrangements of parts without departing from the spirit and ambit of the invention.

Dated this 9th day of October, 2002.

10

SANDERCOCK & COWIE
PATENT ATTORNEYS FOR
ELITE SHOOTING SUPPLIES PTY. LTD.

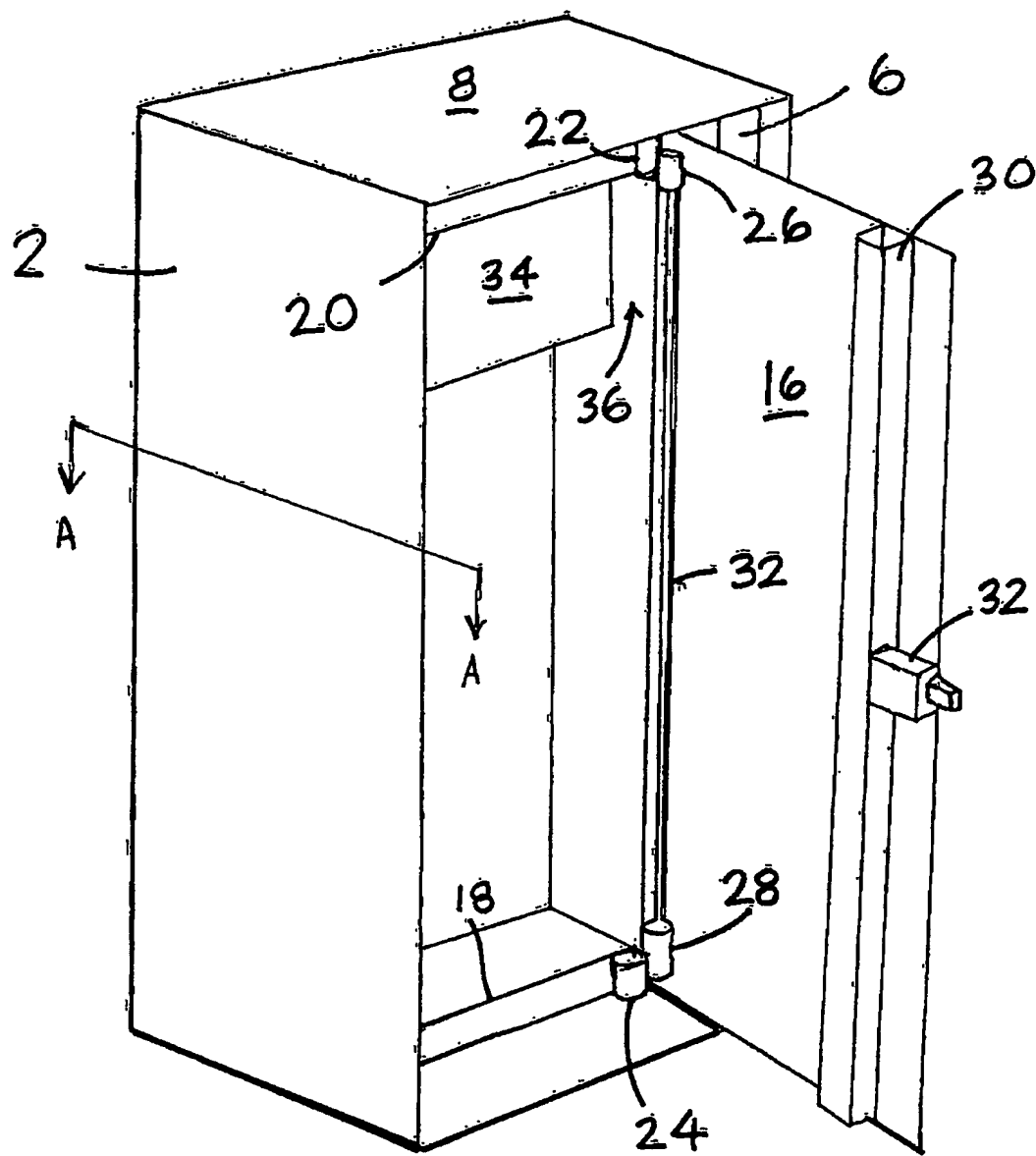


FIG 1

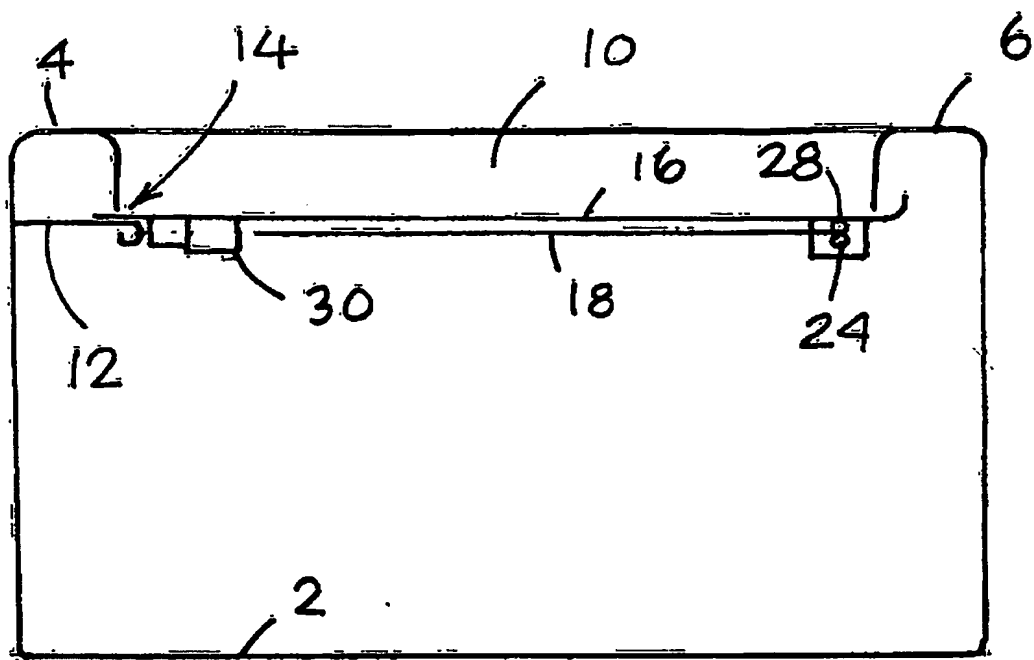


FIG 2

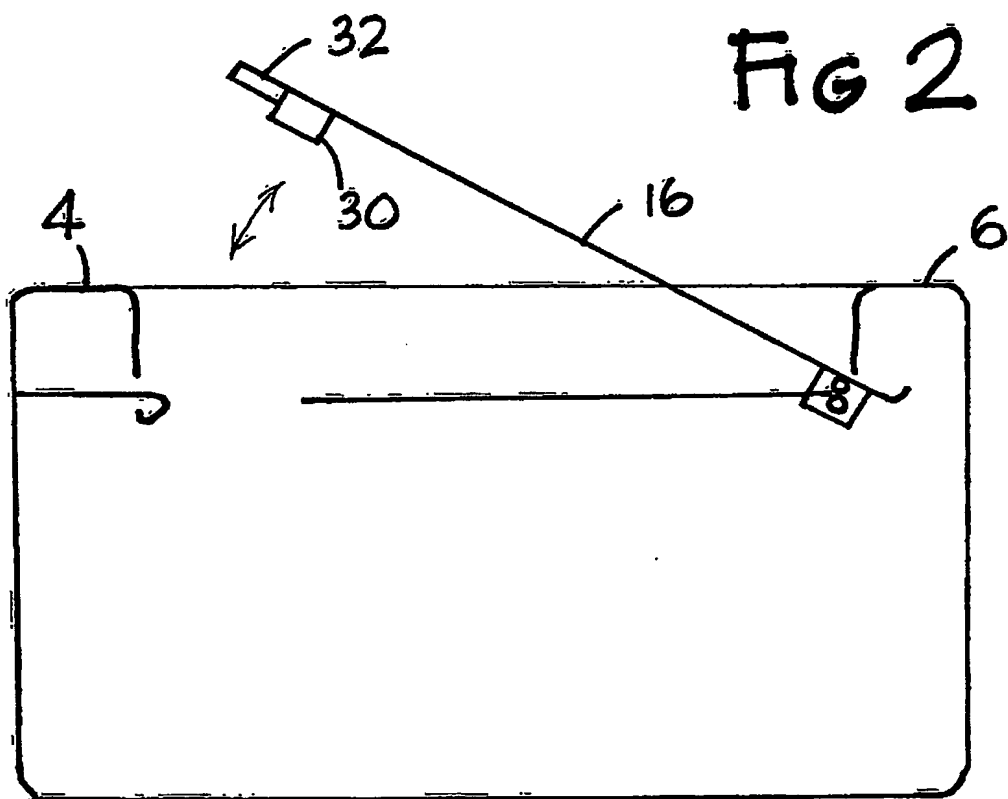


FIG 3

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ BLACK BORDERS
- ☒ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☒ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☒ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.